

REMARKS**I. General**

Claims 1-3, 5-19, and 21-25 were pending in the current application, and all of such claims are rejected in the Final Office Action mailed January 2, 2004. The issues raised in this Final Office Action are:

- Claims 1-3, 5-18, 21-23, and 25 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Number 5,515,181 issued to Iyoda et al. (hereinafter "*Iyoda*") in view of U.S. Patent Number 5,818,612 issued to Segawa et al. (hereinafter "*Segawa*"); and
- Claims 5, 12-13, 19, and 24 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Iyoda* in view of U.S. Patent Number 6,115,482 to Sears et al. (hereinafter "*Sears*").

Applicant respectfully traverses the outstanding rejections, and requests reconsideration and withdrawal thereof in light of the amendments and remarks contained herein.

II. Claim Amendments

Claims 1, 10 and 17 are amended herein, as described further below. Claims 6 and 16 are canceled without prejudice herein. No new matter is added by these claim amendments. Applicant respectfully requests that the above claim amendments be entered because such amendments are believed to place the claims in condition for allowance (as discussed further below) or in better form for consideration on appeal. The amendments were not previously presented because the new grounds of rejection now raised in the final Office Action was not previously presented.

More specifically, claim 1 is amended herein to include the limitations originally presented in claim 6, which depended directly from claim 1. That is, claim 1 now recites "capturing video data of said target scan area" and "displaying said captured video data on a display" as previously presented in dependent claim 6. Accordingly, claim 1 is amended to effectively re-write claim 6 in independent form. As such, claim 6 is canceled without prejudice.

Independent claim 10 is amended herein to include the limitations originally presented in claim 16, which depended directly from claim 10. That is, claim 10 now recites “wherein said linear sensor receives a non-folded optical path of light reflected from said original” as previously presented in dependent claim 16. Accordingly, claim 10 is amended to effectively re-write claim 16 in independent form. As such, claim 16 is canceled without prejudice.

Independent claim 17 is amended herein to recite “means for capturing video data of said target scan area for providing a video preview of the target scan area before said imaging means captures an image of said target scan area.”

III. Claim Rejections Under 35 U.S.C. § 103(a) over *Iyoda* in view of *Segawa*

Claims 1-3, 5-18, 21-23, and 25 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Iyoda* in view of *Segawa*. Applicant respectfully traverses this rejection as discussed further below.

To establish a *prima facie* case of obviousness, three basic criteria must be met. *See* M.P.E.P. § 2143. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference must teach or suggest all the claim limitations. Without conceding any other criteria, Applicant respectfully asserts that the applied combination of *Iyoda* and *Segawa* does not satisfy the third criteria.

Independent Claims 1, 17, and 22

Independent claim 1, as amended herein, recites *inter alia* “capturing video data of said target scan area”.

Independent claim 17, as amended herein, recites *inter alia* “means for capturing video data of said target scan area for providing a video preview of the target scan area before said imaging means captures an image of said target scan area”.

Independent claim 22 recites *inter alia* “a digital video camera for capturing video data of said target area”.

Applicant respectfully submits that the applied combination of *Iyoda* and *Segawa* fails to teach or suggest at least the above elements of independent claims 1, 17, and 22. For instance, neither *Iyoda* nor *Segawa* teach or suggest capturing video data of a target area. The Final Office Action asserts on page 4 with respect to claim 6 (the elements of which are now included in independent claim 1, as discussed above): “*Iyoda* disclose the method (as shown in fig 3), further comprising: capturing video data of said target scan area (original 103b of fig 11, the target area)”.

Thus, the Final Office Action relies upon *Iyoda* as disclosing the recited element of “capturing video data of said target scan area” of claim 1. However, *Iyoda* fails to teach or suggest capturing video data of a target scan area. Fig. 3 of *Iyoda*, which is cited in the above-quoted portion of the Final Office Action regarding this element, shows “a diagram illustrating a whole image read by an imaging device” as specified at column 2, lines 46-47 of *Iyoda*. Thus, Fig. 3 of *Iyoda* shows an example of a whole image read by an imaging device, and fails to teach or suggest capturing video data of a target scan area.

Further, element 103b of fig 11 of *Iyoda*, which is also cited in the above-quoted portion of the Final Office Action, fails to teach or suggest capturing video data of a target scan area. Rather, *Iyoda* teaches at column 6, lines 3-16 that after completing the reading process for the whole image (shown in Fig. 3) the focal point are adjusted so that a reading area 103b (which is a sectional portion of the whole image) is read in a division manner. *Iyoda* teaches that various such sectional portions of the whole image are read and are then processed to be combined to form a resulting captured image.

Nothing in *Iyoda* teaches or suggests capturing video data of a target scan area. Similarly, nothing in *Segawa* teaches or suggests capturing such video data. For instance, *Segawa* teaches an example embodiment in connection with Fig. 3 thereof that a two-dimensional area array sensor 43 may be used for capturing preview image data, but it fails to teach or suggest capturing video data of a target scan area.

In view of the above, the applied combination of *Iyoda* and *Segawa* fails to teach or suggest at least the above elements of independent claims 1, 17, and 22. Accordingly, these independent claims are not obvious under 35 U.S.C. §103(a) over *Iyoda* in view of *Segawa*. Therefore, Applicant respectfully requests withdrawal of this rejection.

Independent Claim 10

Independent claim 10, as amended herein, recites *inter alia* “linear sensor ... and lens for focusing reflected light from said original to said linear sensor, wherein said linear sensor receives a non-folded optical path of light reflected from said original” (emphasis added).

Applicant respectfully submits that the applied combination of *Iyoda* and *Segawa* fails to teach or suggest at least this element of independent claim 10. For instance, neither *Iyoda* nor *Segawa* teach or suggest a linear sensor receiving a non-folded optical path of light reflected from the original. *Iyoda* fails to teach or suggest use of a linear sensor at all, but rather teaches using an area array sensor. *Segawa* teaches use of a linear sensor, but teaches that it receives a folded optical path (e.g., the optical path received by linear sensor 15 is folded by mirror 10 in Fig. 1 of *Segawa*). As the present application describes, a linear sensor as commonly used for capturing high-resolution images in a flatbed scanner may be applied in a look-down scanner by implementing an unfolded optical path that it receives (as opposed to the folded optical path of a typical flatbed scanner).

The Final Office Action apparently relies on *Iyoda* in rejecting this element of claim 10 (which was previously presented in dependent claim 16, as discussed above). For instance, the Final Office Action asserts on page 6 with respect to claim 16: “the look-down digital imaging device (1 of fig 11) wherein said linear sensor (CCD of fig 11) receives a non-folded optical path of light reflected from said original (103 of fig 11)”.

Thus, the Final Office Action relies upon *Iyoda* as disclosing the recited element of “said linear sensor receives a non-folded optical path of light reflected from said original” of claim 10. However, as mentioned above, *Iyoda* fails to teach or suggest using a linear sensor. As discussed in Applicant’s previous Amendment (mailed September 30, 2003), *Iyoda* only teaches use of an area array sensor and fails to provide any teaching of a linear sensor. *Segawa*, on the other hand, does teach a look-down scanner that includes a linear sensor, such as linear sensor 15 of Fig. 1 thereof). However, as mentioned above, *Segawa* teaches an implementation in which such linear sensor 15 receives a folded optical path of light (i.e., that is folded by mirror 10). Thus, *Segawa* also fails to teach or suggest a look-down scanner that includes a linear sensor that receives a non-folded optical path of light reflected from an original.

In view of the above, the applied combination of *Iyoda* and *Segawa* fails to teach or suggest at least the above element of independent claim 10. Accordingly, this independent claim is not obvious under 35 U.S.C. §103(a) over *Iyoda* in view of *Segawa*. Therefore, Applicant respectfully requests withdrawal of this rejection.

Dependent Claims 2-3, 5, 7-9, 11-15, 18, 21, 23, and 25

Dependent claims 2-3, 5, 7-9, 11-15, 18, 21, 23, and 25 depend either directly or indirectly from one of base claims 1, 10, 17, and 22, and thus inherit all limitations of their respective base claims. It is respectfully submitted that these dependent claims are allowable not only because of their dependency from their respective independent claims for the reasons discussed above, but also in view of their novel claim features (which both narrow the scope of the particular claims and compel a broader interpretation of the base claims from which they depend).

IV. Claim Rejections Under 35 U.S.C. § 103(a) over *Iyoda* in view of *Sears*

Claims 5, 12-13, 19, and 24 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Iyoda* in view of *Sears*. Dependent claims 5, 12-13, 19 and 24 depend either directly or indirectly from one of base claims 1, 10, 17, and 22, and thus inherit all limitations of their respective base claims. It is respectfully submitted that these dependent claims are allowable not only because of their dependency from their respective independent claims for the reasons discussed above, but also in view of their novel claim features (which both narrow the scope of the particular claims and compel a broader interpretation of the base claims from which they depend).

V. Conclusion

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Applicant believes no fee is due with this response. However, if a fee is due, please charge Deposit Account No. 08-2025, under Order No. 10001080-1 from which the undersigned is authorized to draw.

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail, Label No. EV 256034306US in an envelope addressed to: M/S AF, Commissioner for Patents, Alexandria, VA 22313.

Date of Deposit: January 30, 2004

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